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Date: June 23, 2004 Planning Commission Meeting Item No.

MILPITAS PLANNING COMMISSION AGENDA REPORT

Category: Public Hearings Report Prepared by: Troy Fujimoto

Public Hearing: Yes: ✓ No: _____

Notices Mailed On: 6/10/04 Published On: 6/10/04 Posted On: 6/10/04

TITLE:	**USE PERMIT NO. UP2004-11**
Proposal:	A request to locate a telecommunication antenna facility, in a cylindrical radome atop an existing 95 foot tall light pole and accompanying ground equipment, at Milpitas High School.
Location:	1285 Escuela Parkway
APN:	026-18-003
RECOMMENDATION:	**Approval with Conditions**
Applicant:	Jennifer Estes, 5855 Doyle Street, #108, Emeryville, CA 94608
Property Owner:	Milpitas Unified School District, attn: Karen Allen, 1331 E. Calaveras Boulevard, Milpitas, CA 95035
Previous Action(s):	None
General Plan Designation:	Single Family Low Density
Present Zoning:	R1-6, Single Family
Existing Land Use:	School
Agenda Sent To:	Applicant & Owner
Attachments:	Plans Project Description Photo Simulations Telecommunications Questionnaire Power Density Report FCC License Alternative Site Analysis Build out map

PJ#2371

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BACKGROUND

The project is located at 1285 Escuela Parkway at Milpitas High School, located north of Jacklin Avenue in the northern half of the city. Milpitas High School opened in September 1970. The school is located within an existing single-family residential neighborhood.

THE APPLICATION/PROJECT DESCRIPTION

The application is filed pursuant to Title XI, Chapter 10, Section 57.02-13 (Conditional Uses, Additional Uses Permitted – Public utility and public service use or structure). The applicant is requesting a use permit to locate telecommunication antennas atop an existing 95 foot tall light pole, near the athletic field at the western end of the campus with associated electronic equipment cabinets located inside a covered enclosure adjacent to the existing athletic building.

Site Layout

The location of the monopole will be on one of the light poles on the eastern end of the football field. The associated equipment in the 150 square foot enclosure will be located to the northeast, adjacent to the athletic building. The football field is on the eastern portion of the campus.

ISSUES

Use Permit Findings

Any approval of a Use Permit or Use Permit Amendment, requires that the Planning Commission make the following findings:

1. The proposed use is consistent with the Milpitas Zoning Ordinance.
2. The proposed use is consistent with the Milpitas General Plan.
3. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety, and general welfare.

The following discussion explains how the proposed project, as conditioned, are able to satisfy these findings.

Conformance with the Zoning Ordinance

The project as proposed conforms to the Zoning Ordinance. The Zoning Ordinance, Section 57 (57.01 (b), 57.02-15, and 57.03-5) allows for the proposed use to be approved in this district if it is deemed essential or desirable to the public, suitable to the site, and not detrimental or injurious to properties in the vicinity. The proposed site of the antennas is in the eastern portion of the campus, with the high school located in the middle of a single-family residential area. The antennas will be mounted atop a 95-foot tall light standard and will be inside a cylindrical radome. The proposed facility blends in well with the site and the light fixture and the enclosure matches the existing buildings on the campus. None of the equipment will be visible from any views and will replace an existing portable storage container, thus improving the immediate appearance of the site. In addition, the facility will provide enhanced coverage for Metro PCS cell phone users and will prevent dropped and lost calls.

Conformance with the General Plan

The project is consistent with the General Plan. By providing for alternate telecommunications services for the conduct of commercial and personal business without creating aesthetic disharmony, it promotes a highly amenable community environment, in keeping with Guiding Principle 2.a-G-1.

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It is also consistent with Implementing Policy 2.a-I-1. The project will foster community growth through beautification of existing and future development. The project involves removing a temporary storage facility with a new enclosure that matches the existing buildings.

Neighborhood Compatibility and Visual Impacts

The applicant is proposing antennae in a cylindrical radome on an existing light pole. Originally the radome was located approximately three quarters of the way up the pole. Staff worked with the applicant to move the radome further up the pole, closer to the light fixtures, to give the appearance that the radome was part of the light fixture, thus drawing less attention to it.

The applicant is also proposing an enclosure adjacent to the existing sports building. As proposed the enclosure matches the existing building and even has a roof type and color that matches other buildings on-site, thus staff is satisfied with the equipment enclosure.

Radio Frequency Emissions:

Federal law preserves the City's authority to regulate the placement, construction, and modification of personal wireless service facilities (47 U.S.C. 332((c)(7)(A).) However, federal law does impose a limitation on this authority in the area of radio frequency (RF) emissions. The City is prohibited by federal law from regulating the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RF emissions to the extent the facilities comply with the Federal Communications Commission's (FCC) regulations concerning such emissions. (47 U.S.C. 332(c)(7)(B)(iv).

The FCC has established guidelines that place limits on human exposure to RF fields generated by personal wireless service facilities. These guidelines have been endorsed by the U.S. Environmental Protection Agency and the Food and Drug Administration. The FCC requires all personal wireless facilities to comply with these guidelines.

The City, however, may still verify that applicants are in compliance with the FCC's guidelines. Therefore, the City requires applicants applying for use approval for any telecommunications device to submit a power density report. This report is reviewed by the City's Telecommunications Advisory Commission to ensure compliance with the FCC's guidelines. To the extent that an applicant's facilities, as proposed, are not in compliance with the FCC's guidelines, the City may require the applicant to make appropriate modifications to the facilities to ensure compliance.

Telecommunications Commission Review

The City of Milpitas Telecommunication Commission reviewed this project on May 17, 2004. Comments and concerns raised by the Telecommunication Commission were in regards to adequate signage in regards to safety and signage warning people of the presence of a monopole at this location. The Telecommunication Commission recommends approval of the proposal to the Planning Commission.

RECOMMENDATION

Close the Public Hearing. Approve Use Permit No. UP2004-11 based on the Findings and Special Conditions of Approval listed below:

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FINDINGS

1. As conditioned, the proposed antenna/monopole at this location will not be detrimental or injurious to the surrounding development nor to the public health and safety, as reviewed by the Telecommunications Commission Committee in regards to equipment and safety issues.
2. As conditioned, the proposed use meets the intent of the General Plan and Zoning Ordinance by providing for alternate telecommunications services for the conduct of commercial and personal business without creating aesthetic disharmony at the site or impacts on surrounding development.
3. As conditioned, the project will not result in any significant visual or aesthetic impacts because the proposed antennae/monopole is visually disguised as a flagpole and enhanced with additional landscaping and the associated electronic cabinets are concealed from views.
4. The project is categorically exempt from further environmental review pursuant to Class 3, Section 15303 – "New construction or conversion of small structures ... installation of small new equipment and facilities in small structures".

SPECIAL CONDITIONS OF APPROVAL

1. This Use Permit No. UP2004-11 is for a telecommunications antenna facility consisting of three panels in a cylindrical radome on an existing 95 foot tall light pole at Milpitas High School and associated electronic equipment and cabinets inside a new enclosure as shown on approved plans dated June 23, 2004, except as may be otherwise modified by these conditions of approval. Any future addition of antennas or modification to approved plans, shall require further review and approval by the Milpitas Telecommunications Commission and Planning Commission. (P)
2. Any change in any dimension or location of the proposed antenna, cabinets, and enclosure from that shown on the plans approved June 23, 2004, shall require an amendment to this Use Permit, which will require a noticed public hearing. (P)
3. This use shall be conducted in compliance with all appropriate local, state and federal laws and regulations and in conformance with the approved plans. (P)
4. Prior to facility installation, plans shall be submitted that show how the project complies with the following requirements (F):
   a) Approved access shall be provided to the equipment enclosure. Provide KNOX lock (quantity and location to be determined by the Fire Dept.) for Fire Department access. CFC (California Fire Code) Section 902.4.
   b) Equipment enclosure/room shall be posted with signage identifying the company name and the site identification number. Signage shall be posed outside and inside the enclosure/room.
   c) The location shall be labeled for the hazard with a sign approved for location and content by the Fire Department. Signage shall conform to the NFPA 704 standards. Signage shall be posted outside and inside of the enclosure/room.
   d) NO SMOKING signs shall be posed outside and inside the equipment enclosure/room. CFC Section 1109.4.
   e) Each antennae shall be identified to denote its function, i.e., transmitter or receiver antennae.

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f) Shutdown of transmitter antennas shall be provided. Written shutdown procedures (including remote shutdown) shall be provided to the Milpitas Fire Department Inspector at the time of inspection. Fire Department inspection shall include system shutdown.

g) For remote shutdown process, the phone number, the specific SITE I.D. number shall be posted outside of the equipment enclosure, on the face of the wireless equipment cabinet, at the electrical equipment (if different location than the wireless equipment), roof hatch, fire control, and other access points to the transmitter antennae.

h) If manual shutdown mechanism is located on site, the shutdown mechanism shall be identified.

i) The installer shall call for an inspection by the Fire Department to verify labeling, signage and transmission shutdown.

5. If at the time of project conformance with conditions of approval there is a project job account balance due to the City for recovery of review fees, review of plans will not be initiated until the balance is paid in full. (P)

(P) = Planning Division
(F) = Fire Department

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CITY OF MILPITAS WIRELESS TELECOMMUNICATIONS FACILITY

PROJECT SUMMARY

Applicant

MetroPCS Inc. is a privately held telecommunications service provider formed in 1994. MetroPCS holds 14 personal communications services (PCS) licenses in the United States. MetroPCS offers an innovative and affordable pricing structure to capitalize on wireless customers' demand sensitivity to price. The company believes that a substantial market opportunity exists to essentially eliminate the pricing gap between existing heavy usage cellular airtime and wire line telephone rates. Relative to current wireless service packages, metroPCS offers more affordable wireless service packages that are available to more citizens of the San Francisco Bay area.

MetroPCS believes that by offering predictable and affordable prices they can attract customers who do not currently use wireless services and customers who are already high-volume users. The company also believes that due to relatively high per minute airtime charges and unpredictable monthly bills, there is a price-sensitive mass consumer market that refrains from subscribing to or extensively using cellular services.

Moreover, metroPCS feels that there exists a relatively untouched consumer segment that is not being targeted by the incumbent providers; namely low income households. This is due, in some part, to the perception that these customers are credit challenged and have only a small amount of discretionary income available. Nationwide carriers are virtually ignoring this sector of the community in favor of the "high-end" users that are more willing to pay for advanced services and the latest in handsets.

MetroPCS offers high quality network coverage by concentrating its network build-out in the "high-usage" areas of its markets. MetroPCS limits the construction of its networks outside of these high-usage areas, because it believes the incremental cost of building out such network coverage is substantial and is inconsistent with the company's objective to be the low cost provider of wireless communications services. MetroPCS is truly a local wireless service provider.

In line with this strategy, metroPCS looks to minimize the amount of new antenna support structures in its markets and pursues co-locating on existing structures as the first and best alternative. MetroPCS understands that the quickest way to market is to work with local planning agencies that allows it to be both financially successful and a responsible corporate citizen. The goal of metroPCS is to offer affordable mobile telephony to consumers in the areas where they are most likely to use them.

Personal Communication Services

Personal Communication Services or "PCS" represents a new generation of wireless technology. By utilizing digital transmission, PCS is able to dramatically improve the quality of service for wireless consumers. Conventional analog-cellular systems do not have the advantage of speaking in the digital language of computers. This digital transmission allows PCS to outperform traditional cellular in a number of ways, including:

- Improved voice quality and consistency
- Increased security and privacy
- Feature-rich digital service choices such as voice mail, paging, and caller ID

- Digital data transmission
- Alpha numeric paging

PCS Site Selection

Once the decision has been made to expand PCS coverage to a community, metroPCS engineers prepare a preliminary network design based on many factors, including the characteristics of the community, available radio frequencies and wireless equipment capabilities. A map of the selected "search area" and other requirements for the site are provided to property consultants who visit the community to identify and rank potential sites. This search area represents the area in which a facility must be located to allow it to function as an integral unit in the PCS system.

Whenever feasible, metroPCS strives to acquire sites that blend with local character and are unobtrusive to the community. Existing structures such as water tanks, building rooftops, and competitor-owned towers are often the first choice for sites. When construction of a new structure is required, sites are chosen by their proximity to compatible land uses. Wireless communication facilities must be considered as part of a network, not as individual locations. Communication facilities can be likened to links in a chain, one link adds to the next, making the network design larger. Once these links, or communication facilities, are constructed, it is difficult to adjust the network design or move individual sites.

Property Description

Please refer to "Legal Description of Subject Property"

The proposed facility will be located at the Milpitas High School, 1285 Escuela Parkway in the City of Milpitas. The subject parcel is owned by the Milpitas Unified School District. The assessor's parcel number is 026-18-003 and consists of approximately 21 acres. The subject parcel is in a designated R-1 (Single Family Residence) Zoning District. Situated on the subject property are various buildings and structures serving the various functions of the high school. In addition, there is a large sports field with stadium seating, field lights, and an ample parking lot.

Nature of Request/Zoning Analysis

Please refer to the "Site Development Plans"

MetroPCS is requesting a Conditional Use Permit to allow for the construction and operation of an unmanned wireless telecommunications facility. The proposed facility consists of three (3) panel antennas mounted to an existing stadium light pole. The height of the stadium light is 95'-8" and the proposed antennas would be mounted underneath the actual light fixtures at an effective centerline height of 80'-0". The antennas will be the same non-reflective gray color to match the existing light pole. A new masonry block compound will conceal the three (3) associated equipment cabinets that will be located at ground level and abutting an existing building (gym). The compound will measure 10'0" x 15'-8" and will match the color scheme of the school so that it integrates well with the existing buildings located on the subject property.

Pursuant to the City of Milpitas Zoning Ordinance, Chapter XI-10, "Zoning," Section 57, "Conditional Uses Permitted by Commission," states that a Conditional Use Permit can be:

> *§57.01(a) ....issued by the city to allow a particular land use which would not otherwise be permitted as a matter of right in a zoning district.*

Further, pursuant to Chapter XI-10, Section 57.02, "Additional Uses Permitted," the Commission may, after a public hearing, permit the following uses in districts from which they are prohibited where such uses are deemed essential or desirable to the public convenience or welfare and are in harmony with the Master Plan:

§57.02-13 Public utility and public service use or structure.

Therefore, metroPCS' proposed wireless telecommunications facility will require a Conditional Use Permit. Furthermore, all setbacks will be complied with and no streets, rights-of-way or easements will be encroached upon.

Communication Facility Components and Operations

Each metroPCS communication facility consists of a tower or other support structure, panel antennas, base station equipment and a generator or emergency power source, when needed. No nuisances will be generated by the proposed PCS facility, nor will the facility injure the public health, safety, morals or general welfare. PCS technology does not interfere with any other forms of communication whether public or private. To the contrary, PCS technology will provide vital communications in emergency situations and will commonly be used by local residents and emergency personnel to protect the general public's health, safety and welfare.

Statement of Operations

Once the construction of the PCS facility is complete and the telephone switching equipment is fine-tuned, visitation to the site by service personnel for routine maintenance will occur an average of once a month. The site is entirely self-monitored and connects directly to a central office where sophisticated computers alert personnel to any equipment malfunction or breach of security.

Because the PCS facility will be unstaffed, there will be no regular hours of operation and no impact to existing traffic patterns. No water or sewer services will be required. Ingress and egress will be provided along with parking for service personnel who arrive infrequently to service the site.

Compliance with Federal Regulations

MetroPCS will comply with all FCC rules governing construction requirements, technical standards, interference protection, power and height limitations, and radio frequency standards. In addition, the company will comply with all FAA rules on site location and operation.

City of Milpitas
Planning Division
455 E. Calaveras Blvd.
Milpitas, CA 95035
(408) 586-3279

Questionnaire for Telecommunication Facility Providers

All applicants requesting to install telecommunications facilities within the City of Milpitas must complete this questionnaire as part of their use permit application submittal.

Applicant Name: PEACOCK ASSOCIATES JENNIFER ESTES (ON BEHALF OF METROPCS)

Applicant Address: 5855 DOYLE ST., # 108, EMERYVILLE, CA 94608

Applicant Phone: (510) 420-5701

Applicant Fax and e-mail address: (510) 420-5702 jestes@peacockassociates.com

Provide a brief description of project (Telecommunications Facility): METROPCS PROPOSES TO CONSTRUCT AND OPERATE A WIRELESS TELECOMMUNICATIONS FACILITY CONSISTING OF MOUNTING (3) ANTENNAS TO AN EXISTING STADIUM LIGHT AND (3) EQUIPMENT CABINETS IN A NEW COMPOUND MEASURING 157 SQ. FT.

Location of Project: MILPITAS HIGH SCHOOL 1285 ESCUELA PARKWAY

1. Please indicate below the frequency range you plan to use?

- ☐ VHF Low-Band (30-50 Mhz or 72-76 Mhz)
- ☐ VHF High-Band (136-174 Mhz or 220-222 Mhz)
- ☐ UHF or T-Band (406-420 Mhz or 450-470 Mhz or 470-512 Mhz)
- ☐ 800 or 900 Mhz Band (800-960 Mhz except 900 Mhz Spread Spectrum)
- ☐ 900 Mhz Spread Spectrum (902-928 Mhz)
- ☒ Other than specified above (State frequency band in Mhz) Describe: 1895 - 1990 Mhz

2. Please indicate below the channel/system proposed for use?

- ☐ A single channel
- ☐ Multiple channel
- ☐ A frequency agile system
- ☒ A spread spectrum system
- ☐ Other than specified above. Describe: _____

3. Will the operation be

- ☐ Narrow band (±5 Khz or less deviation)
- ☐ Broad band (greater than ±5 Khz deviation)
- ☒ Spread Spectrum
- ☐ Other than specified above. Describe: _____

4. What will the effective radiated power (ERP) be when all channels at your proposed site are radiating? 1000 WATTS ___ Will the site be in compliance with current ANSI radiation health standards? YES

5. What horizontal radiation pattern is planned for this project?

- ☐ Omnidirectional
- ☒ Sectored
- ☐ Directional (provide half power beam width)_____ _____

6. What will the vertical radiation angle (half power beam width) be for your proposed antenna(s)? ___ 6 DEGREES

7. How high above the local terrain(e.g., surrounding structures) will the center of radiation of your proposed antenna(s) be? 38 50 feet

8. How close to your proposed project is the nearest roadway 654 feet/miles and, if elevated, what is the roadway's height above the local terrain? 0 feet

9. How close to your proposed project is the nearest regularly occupied building and how high is the top floor above local terrain? CLOSEST BUILDING IS APPROXIMATELY 40' AWAY FROM THE PROJECT. BUILDING IS 18' IN HEIGHT.

10. What is the distance to the nearest existing radio communications or broadcast antenna(s) if less than 1/2 mile? _____ feet/miles Answer question 1 for such existing antenna(s) and identify owner/operator, if known. NEAREST FACILITY IS 1.6 MILES AWAY LOCATED AT 901 E. CALAVERAS BLVD. (SFA-212-323)

11. What is the status of your FCC license grant? EXPIRES 01-27-07 (Include a copy of the license with submittal of this questionnaire.)

NOTE: The below listed items are also required by the applicant as part of this submittal:

a) Provider's build-out map showing all sites anticipated within Milpitas (see question no. 2)

b) Photo simulations of antenna(s) as viewed from at least three surrounding view points. Show "worst case" vantage points.

c) List of all sites that were investigated for a particular search ring and the reasons why they were discarded. Include names and phone numbers of persons contacted regarding potential sites.

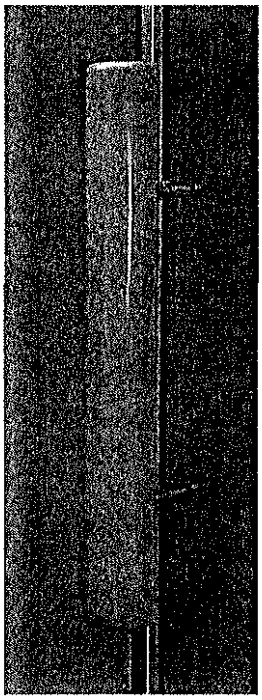
d) Copy of applicants Power Density Study (see item no. 4).

Slant +/- 45° Dual Polarized, Panel 60° / 18.5 dBi

BXA-185060/8CF ____

When ordering, replace "___" with connector type.

1850-1990 MHz



Mechanical specifications

	Length	1278 mm	50.32 in
	Width	154 mm	6.06 in
	Depth	80 mm	3.15 in
4)	Weight	4.5 kg	10.0 lbs
	Wind Area		
	Front	0.197 m^2	2.12 ft^2
	Side	0.102 m^2	1.10 ft^2
	Rated Wind Velocity (Safety factor 2.0)		
		>321.9 km/hr	>200 mph
	Wind load @ 100 mph (161 km/hr)		
	Front	298 N	67 lbs
	Side	175 N	39 lbs

Antenna consisting of aluminum alloy with brass feed-lines covered by a UV safe fiberglass radome.

Mounting & Downtilting:

Wall mounted or pole tower mount with mounting brackets.

Mounting bracket kit #26799997

Downtilt bracket kit #26799999
The downtilt bracket kit includes the mounting bracket kit.

Electrical specifications

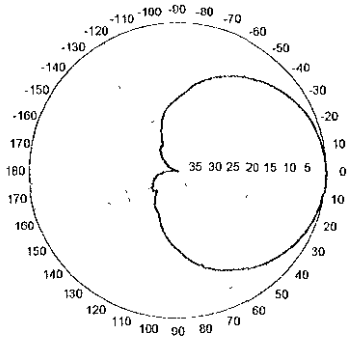
	Frequency Range	1850-1990 MHz
	Impedance	50Ω
3)	Connector	NE, E-DIN
1)	VSWR	≤1.4:1
	Polarization	Slant ± 45°
1)	Isolation Between Ports	< -30 dB
1)	Gain	18.5 dBi
2)	Power Rating	250 W
1)	Half Power Angle	
	H-Plane	60°
	E-Plane	7°
1)	Lobe Tilt	0°
1)	Null Fill	5%
	Lightning Protection	Direct Ground

Patented Dipole Design: U.S. Patent No. 6,597,324 B2

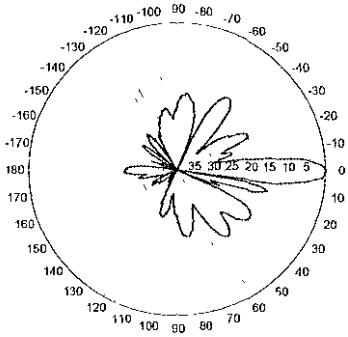
1) Typical Values
2) Power Rating limited by connector only.
3) NE indicates an elongated N Connector.
E-DIN indicates an elongated DIN Connector.
4) The antenna weight listed above does not include the bracket weight

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern[1)]



Horizontal



Vertical

Radiation patterns for all antennas *are measured with the antenna* mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back Ratio.

CF Denotes a Center-Fed Connector.

1850-1990 MHz

Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- Watercut brass feedline assembly for consistent performance.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band-width and superior performance.
- Air as insulation for virtually no internal signal loss.

Every Amphenol Antel antenna is under a five-year limited warranty for repair or re-placement.

Antenna available with center-fed connector only.

Amphenol Antel, Inc.
The Antenna Technology Company

1300 Capital Drive Rockford, IL 61109 Toll-Free (888) 417-9562 Tel. (815) 399-0001
Fax. (815) 399-0156 Email: antel@antelinc.com www.antelinc.com

Revision Date: 12/15/03

United States of America
Federal Communications Commission

RADIO STATION AUTHORIZATION

Commercial Mobile Radio Services

Personal Communications Service - Broadband

GWI PCS1, INC.
8144 WALNUT HILL LANE
SUITE 600
DALLAS, TX 75231

Call Sign: **KNLF566**
Market: **B404**
SAN FRANCISCO-OAKLAND-
Channel Block: **C**
File Number: **00447-CW-L-96**

The licensee hereof is authorized, for the period indicated, to construct and operate radio transmitting facilities in accordance with the terms and conditions hereinafter described. This authorization is subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts of Congress, international treaties and agreements to which the United States is a signatory, and all pertinent rules and regulations of the Federal Communications Commission, contained in the Title 47 of the U.S. Code of Federal Regulations.

Initial Grant Date	**January 27, 1997**
Five-year Build Out Date	**January 27, 2002**
Expiration Date	**January 27, 2007**

CONDITIONS :

Pursuant to Section 309(h) of the Communications Act of 1934, as amended, (47 U.S.C. § 309(h)), this license is subject to the following conditions: This license does not vest in the licensee any right to operate a station nor any right in the use of frequencies beyond the term thereof nor in any other manner than authorized herein. Neither this license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended (47 U.S.C. § 151, et seq.). This license is subject in terms to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended (47 U.S.C. § 606).

Conditions continued on Page 2.

WAIVERS :

No waivers associated with this authorization.

CONDITIONS:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is conditioned upon the full and timely payment of all monies due pursuant to Sections 1.2110 and 24.711 of the Commission's Rules and the terms of the Commission's installment plan as set forth in the Note and Security Agreement executed by the licensee. Failure to comply with this condition will result in the automatic cancellation of this authorization.

CITY OF MILPITAS WIRELESS TELECOMMUNICATIONS FACILITY

INVESTIGATED ALTERNATIVES

The purpose of this analysis is to explain the alternatives that were considered before choosing the Milpitas High School as the best and only candidate for the metroPCS wireless telecommunications facility.

Site Selection Overview

Please refer to the attached Search Ring Map

For a PCS antenna site to be feasible, it must meet technical measurement requirements relative to the surrounding sites in the network and the overall environment. Sites must have line-of-sight visibility to each other. Most sites should be at or near busy intersections of major roads or in areas of high activity in order to service the high number of calls expected. Height is very important. The antenna centerline must be 10 to 20 feet above surrounding buildings, trees, and other obstacles that might interfere with a clear line of sight. However, the antenna cannot be too high or it may interfere with other sites. Existing buildings, topography, and landscape (inside and outside the search ring) must be considered for technical feasibility.

Other considerations when selecting a site are:

- Willing landlord
- Feasible location for an antenna and the accompanying equipment
- Availability of power and telephone
- Aesthetics
- Possible co-location opportunities
- The policy of the jurisdiction on wireless communications facilities
- The distribution of antennas in the overall network

Investigated Alternatives

Please refer to the attached Alternative Site Location Map

The Milpitas Corporate Yard, located at 1585 Rodgers Street, was also considered. However, it was determined that the landlord was not interested after repeatedly trying to contact the landlord with receiving no response. Additionally, this site is located out of the metroPCS search ring which may have had technological drawbacks to having a facility at this site.

Conclusion

As the subject property is publicly owned it is a preferred siting for a wireless telecommunications facility. In addition, the Milpitas High School consists of over 21 acres and is located directly in a viable area as determined by metroPCS engineers (middle of search ring). Along with meeting the RF requirements, the property also has the advantage of discreetly housing a wireless telecommunications facility. The proposed facility incorporates an existing use (stadium field light) for stealthing three (3) antennas to, and the minimal size of the equipment compound (157 square feet) will be nestled up next to an existing building (gym) with

a masonry block wall that will conceal the equipment from view. The colors for the proposed facility will match the existing color scheme of the high school to further enhance the cohesiveness of the project with the existing buildings and structures. The proposed facility meets the siting requirements and is a preferred location per the City of Milpitas, in addition to the technological and aesthetical requirements, and is therefore deemed the best choice for metroPCS' facility.

SITE NAME: Milpitas 0653
SITE NUMBER: SFA-Z08-0653

METRO PCS INC
SEARCH AREA RELEASE FORM

LATITUDE: 37.45019
LONGITUDE: -121.90190

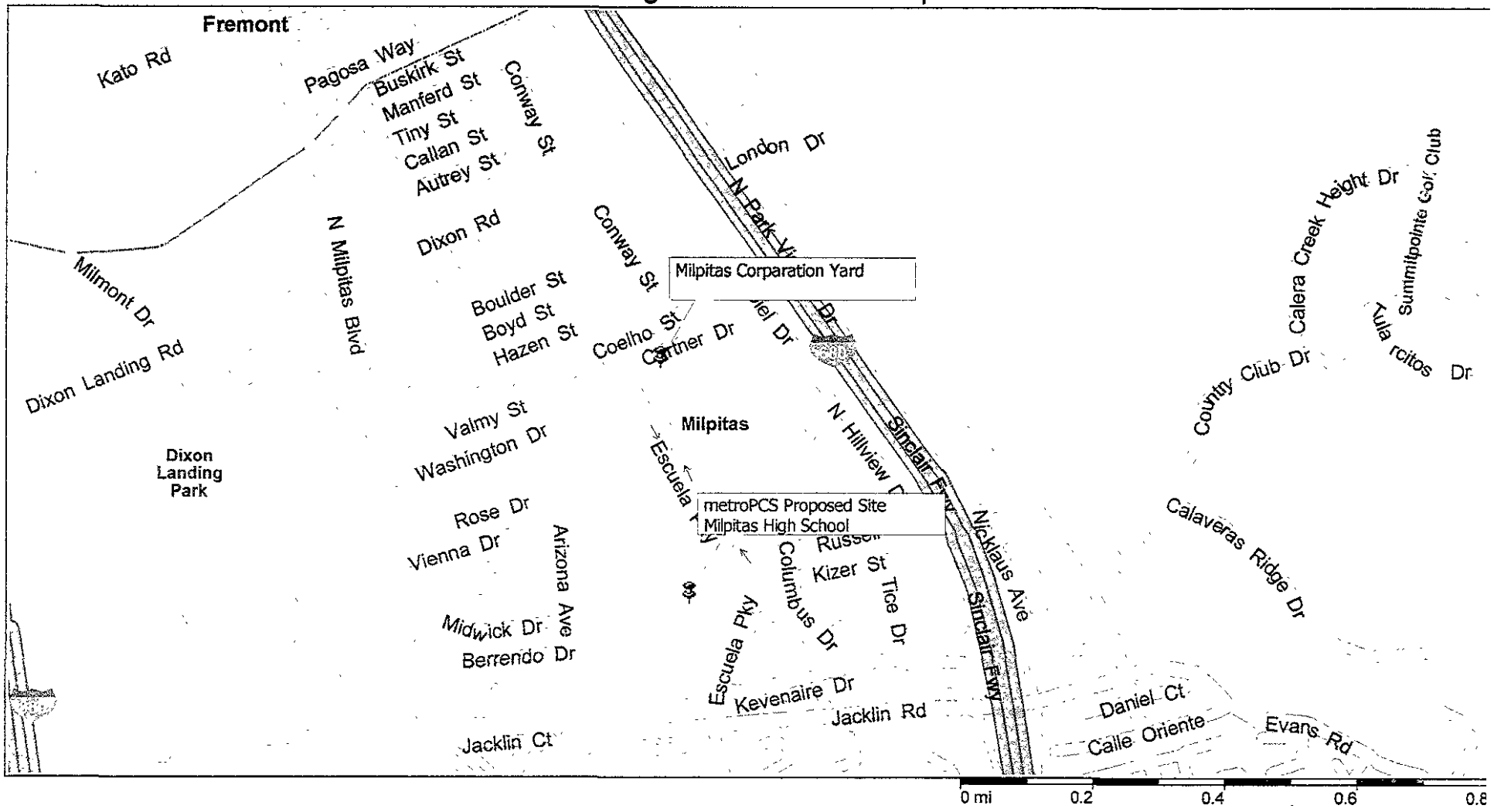
CENTERLINE: 50 feet or 20 ft above clutter
E OBJECTIVE: Residential and Commercial areas within a mile radius of the block bound by Arizona,Wahington and Escuelia Prkwy in Milpitas
ER: Joe Saluta PHONE NUMBER: 510-938-0138

SEARCH RADIUS: 0.10 miles
DATE: January 13, 2004

METROPCS SFA-Z08-653

MILPITAS HIGH SCHOOL
1285 ESCUELA PKWY
MILPITAS CA 95035

Investigated Alternatives Map



MetroPCS • Proposed Base Station (Site No. SFA-Z08-653A)
1285 Escuela Parkway • Milpitas, California

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of MetroPCS, a wireless telecommunications carrier, to evaluate the base station (Site No. SFA-Z08-653A) proposed to be located at 1285 Escuela Parkway in Milpitas, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission ("FCC") evaluate its actions for possible significant impact on the environment. In Docket 93-62, effective October 15, 1997, the FCC adopted the human exposure limits for field strength and power density recommended in Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent Institute of Electrical and Electronics Engineers ("IEEE") Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes nearly identical exposure limits. A summary of the FCC's exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

The most restrictive thresholds for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Personal Wireless Service	Approx. Frequency	Occupational Limit	Public Limit
Personal Communication ("PCS")	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870	2.90	0.58
Specialized Mobile Radio	855	2.85	0.57
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios" or "cabinets") that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables about 1 inch thick. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the

horizon, with very little energy wasted toward the sky or the ground. Along with the low power of such facilities, this means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation," dated August 1997. Figure 2 attached describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Metro, including zoning drawings by Genre Technology, Inc., dated March 24, 2004, it is proposed to mount three Antel Model BXA-185060-8CF directional panel antennas on an existing 95½-foot light pole, sited east of the running track at Milpitas High School, located at 1285 Escuela Parkway in Milpitas. The antennas would be mounted at an effective height of about 80 feet above ground and would be oriented at 120° spacing, to provide service in all directions. The maximum effective radiated power in any direction would be 1,890 watts, representing six channels operating simultaneously at 315 watts each. There are reported no other wireless telecommunications base stations installed nearby.

Study Results

The maximum ambient RF level anywhere at ground level due to the proposed Metro operation is calculated to be 0.0016 mW/cm^2, which is 0.16% of the applicable public exposure limit. The maximum calculated level on the roof of the nearby building is 0.25% of the public exposure limit; the maximum level at the second floor elevation of any of the nearby homes* is 0.043% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels.

Recommended Mitigation Measures

Since they are to be mounted on a tall light pole, the Metro antennas are not accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure

* Located at least 650 feet away, based on aerial photographs from Maps a la carte, Inc.

guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 5 feet directly in front of the Metro antennas themselves, such as might occur during maintenance work on the existing lights, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs† at the antennas and/or on the pole below the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the base station proposed by MetroPCS at 1285 Escuela Parkway in Milpitas, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2005. This work has been carried out by him or under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

William F. Hammett, P.E.

March 31, 2004

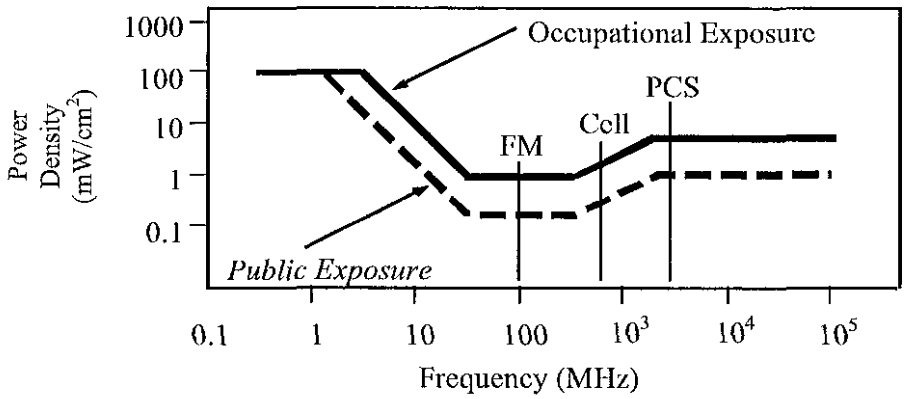
† Warning signs should comply with ANSI C95.2 color, symbol, and content conventions. In addition, contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.

FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements, which are nearly identical to the more recent Institute of Electrical and Electronics Engineers Standard C95.1-1999, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz." These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm^2)	
0.3 - 1.34	614	*614*	1.63	*1.63*	100	*100*
1.34 – 3.0	614	*823.8/f*	1.63	*2.19/f*	100	*180/f^2*
3.0 – 30	1842/ f	*823 8/f*	4.89/ f	*2.19/f*	900/ f^2	*180/f^2*
30 - 300	61.4	*27.5*	0.163	*0.0729*	1.0	*0.2*
300 – 1,500	$3.54\sqrt{f}$	*$1.59\sqrt{f}$*	$\sqrt{f}/106$	*$\sqrt{f}/238$*	f/300	*f/1500*
1,500 - 100,000	137	*61.4*	0.364	*0.163*	5.0	*1.0*



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.

RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications cell sites. The near field zone is defined by the distance, D, from an antenna beyond which the manufacturer's published, far field antenna patterns will be fully formed; the near field may exist for increasing D until some or all of three conditions have been met:

$$1)\ D > \frac{2h^2}{\lambda} \qquad 2)\ D > 5h \qquad 3)\ D > 1.6\lambda$$

where h = aperture height of the antenna, in meters, and
λ = wavelength of the transmitted signal, in meters.

The FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives this formula for calculating power density in the near field zone about an individual RF source:

$$\text{power density } S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}, \text{ in } mW/cm^2,$$

where θ_{BW} = half-power beamwidth of antenna, in degrees, and
P_{net} = net power input to the antenna, in watts.

The factor of 0.1 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates distances to FCC public and occupational limits.

Far Field.

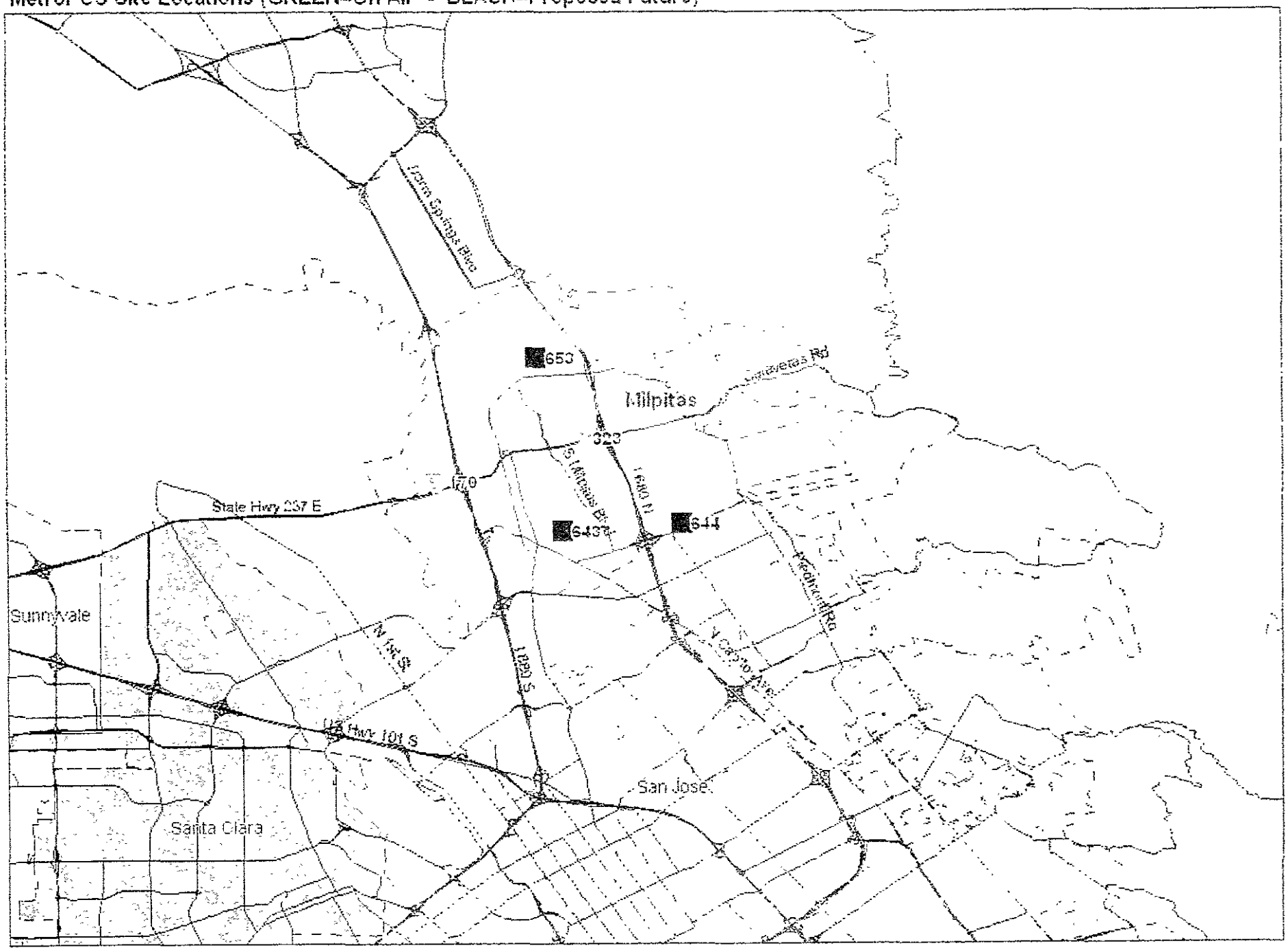
OET-65 gives this formula for calculating power density in the far field of an individual RF source:

$$\text{power density } S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}, \text{ in } mW/cm^2,$$

where ERP = total ERP (all polarizations), in kilowatts,
RFF = relative field factor at the direction to the actual point of calculation, and
D = distance from the center of radiation to the point of calculation, in meters.

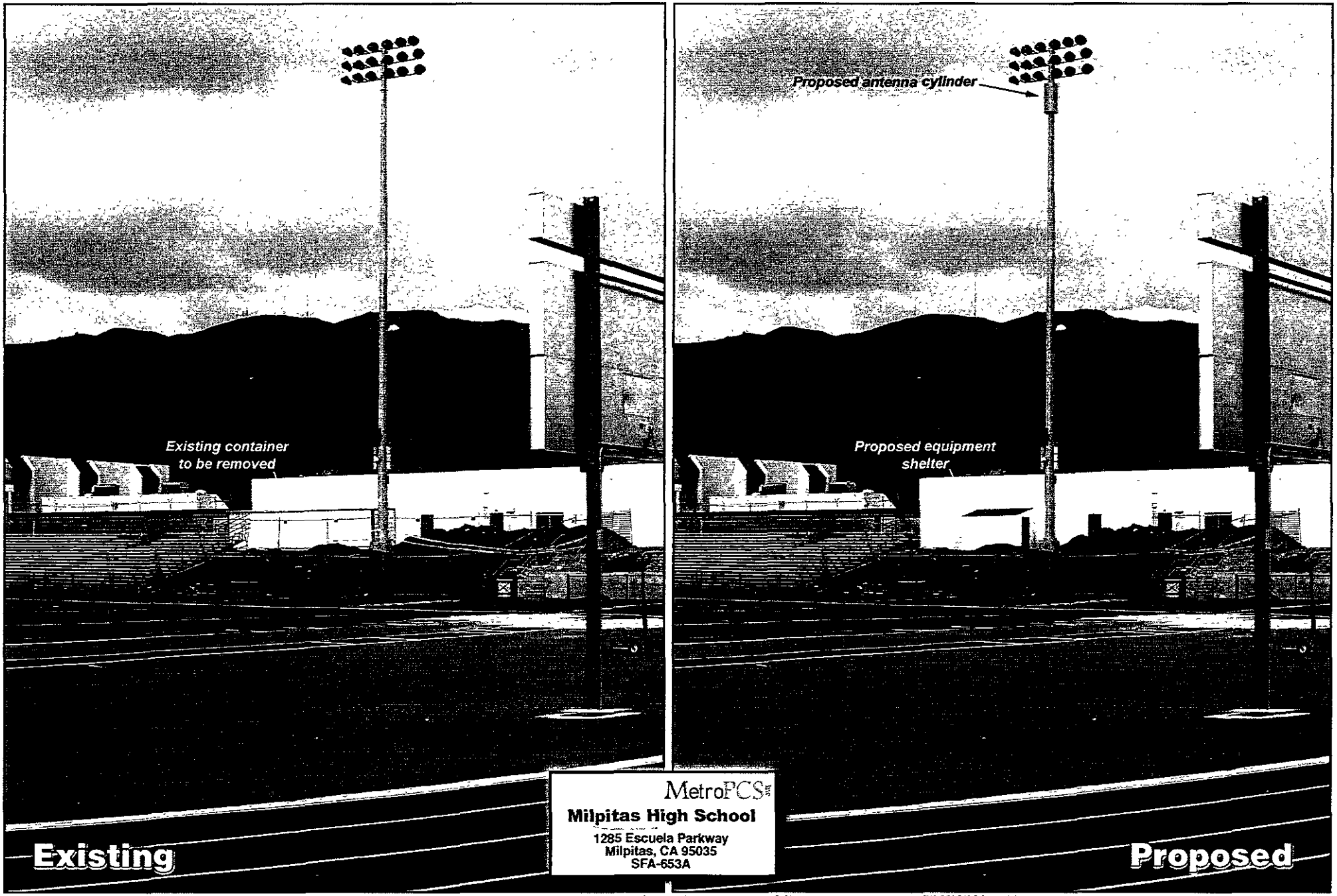
The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

MetroPCS Site Locations (GREEN=On Air - BLACK=Proposed Future)



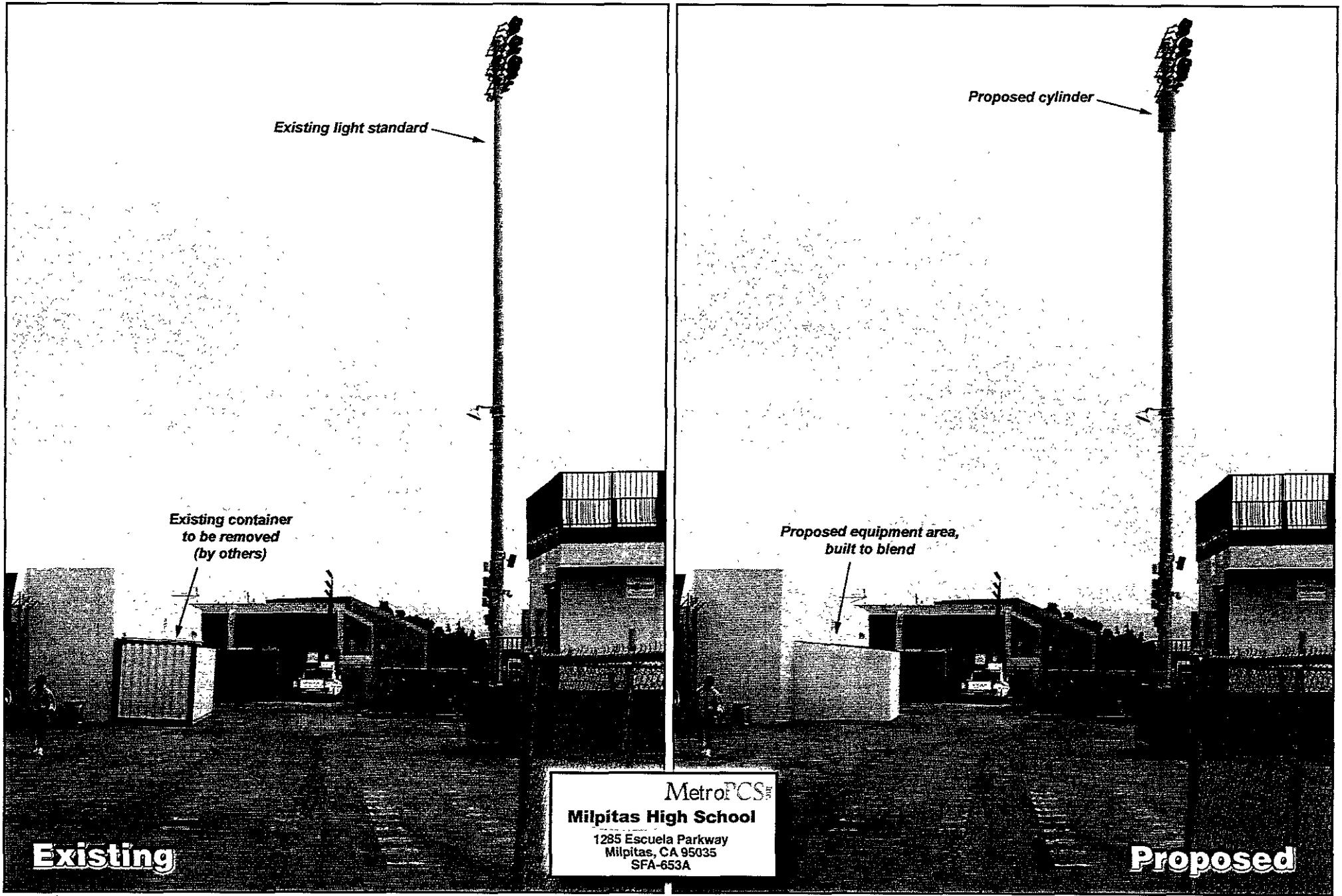
Milpitas Area 3/30/04

Photosimulation of view looking northeast from the track.



Previsualists

Photosimulation of view looking south from between the bleachers and the buildings.



MetroPCS

Milpitas High School

1285 Escuela Parkway
Milpitas, CA 95035
SFA-653A

Previsualists

metroPCS

MILPITAS HIGH SCHOOL
SF06530A
1285 ESCUELA PARKWAY
MILPITAS, CA 95035
SANTA CLARA COUNTY

TYPE OF EQUIPMENT:	CDMA-MODCELL
SITE TYPE:	STADIUM LIGHT STANDARD
RAD CENTER:	83'-4"
LATITUDE:	N 37° 27' 00.93"
LONGITUDE:	W 121° 54' 09.13"

SYMBOLS AND ABBV.

A/C	AIR CONDITIONING	MAX	MAXIMUM
ADJ	ADJUSTABLE	MECH	MECHANICAL
AFF	ABOVE FINISH FLOOR	MET.MTL	METAL
APPROX	APPROXIMATELY	MFR	MANUFACTURER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MGR	MANAGER
AWG	AMERICAN WIRE GAUGE	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BLK	BLOCK		
BMR	BASE MOBILE RADIO	N	NORTH
B/S	BUILDING STANDARD	NA	NOT APPPLICABLE
		NIC	NOT IN CONTRACT
CLG	CEILING	NTS	NOT TO SCALE
CLR	CLEAR		
CND	CONDUIT	OC,o/c	ON CENTER
CONC	CONCRETE	OD	OUTSIDE DIAMETER
CONST	CONSTRUCTION	OPG	OPENING
CONT	CONTINUOUS	OPP	OPPOSITE
DBL	DOUBLE		
DIA	DIAMETER	PLYWD	PLYWOOD
DNG	DIAGONAL	PR	PAIR
DIM	DIMENSION	PROJ	PROJECT
DN	DOWN	PROP	PROPERTY
DTL,DETL	DETAIL	PT	PRESSURE TREATED
DWG	DRAWING		
		REQ'D	REQUIRED
E	EAST	RM	ROOM
EA	EACH	RO	ROUGH OPENING
EL/ELEV	ELEVATION		
ELECT	ELECTRICAL	S	SOUTH
EQ	EQUAL	SHT	SHEET
EQUIP	EQUIPMENT	SIM	SIMILAR
EW	EACH WAY	SPEC	SPECIFICATION
EXIST	EXISTING	SQ	SQUARE
EXT	EXTERIOR	SSS	STAINLESS STEEL
		ST.	STEEL
FIN	FINISH	STRUCT	STRUCTURAL
FLUOR	FLUORESCENT	SUSP	SUSPENDED
F.F.	FLOOR	SV	SHEET VINYL
FT	FOOT		
		THRU	THROUGH
GA	GAUGE	TNND	TINNED
GALV	GALVANIZE(D)	TOC	TOP OF CONCRETE
GC	GENERAL CONTRACTOR	TOM	TOP OF MASONRY
GRND	GROUND	TYP	TYPICAL
GWB	GYPSUM WALL BOARD		
GYP. BD	GYPSUM BOARD	UBC	UNIFORM BUILDING CODE
		UNO	UNLESS NOTED OTHERWISE
HARD WD	HARDWOOD		
HORIZ	HORIZONTAL	VERT	VERTICAL
HR	HOUR	VIF	VERFY IN FIELD
HT	HEIGHT	VT	VINYL TILE
HVAC	HEATING, VENTING & AIR CONDITIONING	W	WEST
		W/	WITH
ID	INSIDE DIA	WIN	WINDOW
IN	INCH	W/O	WITHOUT
INFO	INFORMATION	W/P	WATERPROFE
INSUL	INSULATION		
INT	INTERIOR	∠	ANGLE
LB(S)	POUND(S)	&	AND
		℄	CENTER LINE
		℘	PROPERTY LINE
		@	AT
		#	NUMBER

1 REVISION
1 KEY NOTE
100 ROOM NUMBER
22 KEYED NOTES
DETAIL REFERENCES
ELEVATION REFERENCES
SECTION REFERENCES

CONSULTANT TEAM

ARCHITECT
GENRE TECHNOLOGY INC
2C5 MAIN STREET, SUITE F
PLEASANTON, CA 94566
CONTACT: LOUIS KAO
E-MAIL: lkao@genretech.com
PHONE (925) 846-3212 FAX. (925) 846-3207

SURVEYOR
PHIL AUER SURVEYING
39382 SUTTER DRIVE
FREMONT, CA 94538
PHONE: (510) 796-2101 FAX (510) 894-0794

STRUCTURAL
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PLEASANTON, CA 94566
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ELECTRICAL
DESIGN ELECTRIC
39 WYOMING STREET
PLEASANTON, CA 94566
TEL. (925) 846-0650 FAX (925) 484-5980

POWER COMPANY: PG&E PHN FAX
CONTACT: - E-MAIL:

TEGLO COMPANY: SBC PHN FAX
CONTACT: - E-MAIL:

APPROVALS

LANDLORD/OWNER _____
CONSTRUCTION MANAGER: _____
LEASING MANAGER _____
PLANNER: _____
RF ENGINEER _____
SIGNATURE DATE

PROJECT SUMMARY

APPLICANT/LESSEE
METRO PCS INC. PHONE (510) 523-2610
1080 MARINA VILLAGE PARKWAY FAX (510) 748-1823
4 TH FLOOR
ALAMEDA, CA 94501

CONTACT: KERSTEN RUTHERFORD, PROJECT MANAGER
PHONE (510) 747-4621

CONTACT JAMES WEILAND, CONSTRUCTION MANAGER
PHONE (510) 747-4506

CONTACT JENNIFER ESTES, ZONING MANAGER
PHONE (510) 420-5701

PROPERTY INFORMATION
OWNER MILPITAS UNIFIED SCHOOL DISTRICT
ADDRESS 1331 E. CALAVERAS BLVD
MILPITAS, CA 95035
CONTACT KEITH WALKER
PHONE (925) 756-5656
FAX

A.P.N 026-18-003

PROJECT INFORMATION
AREA OF CONSTRUCTION EQUIP. LEASE AREA =157.0 SQ. FT.

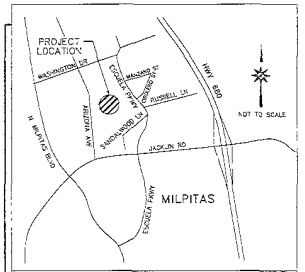
OCCUPANCY TYPE TELECOMMUNICATIONS FACILITY
CONSTRUCTION TYPE N/A
CURRENT ZONING R-1

ACCESSIBILITY REQUIREMENTS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAPPED ACCESS NOT REQUIRED

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT FOR THE "METRO PCS" WIRELESS TELECOMMUNICATIONS NETWORK. A TOTAL OF (3) THREE PANEL ANTENNAS CONCEALED WITHIN A 36"ø RADOME MOUNTED ON AN EXISTING 80'-8" HIGH STADIUM LIGHT POLE. THE EQUIPMENT WILL BE MOUNTED ON A NEW CONCRETE SLAB WITHIN A CMU WALL ENCLOSURE (BUILT AND PAINTED TO MATCH EXISTING BUILDING) LOCATED AT GRADE LEVEL

VICINITY MAP



SITE DIRECTIONS

DEPART 1080 MARINA VILLAGE PKWY, ALAMEDA, CA 94501
TURN LEFT ONTO INDEPENDENCE DR
TURN RIGHT ONTO TRIUMPH DR
TURN LEFT ONTO ATLANTIC AVE
CONTINUE ON SHERMAN ST
TURN LEFT ONTO BUENA VISTA AVE
TURN LEFT ONTO PARK ST
CONTINUE ON 29TH AVE
MERGE ONTO I-880 SOUTH TOWARDS SAN JOSE
TAKE THE MISSION BLVD/WARREN AVE EXIT
MERGE ONTO I-880 SOUTH TOWARDS MILPITAS
TAKE THE JACKLIN RD EXIT
BEAR RIGHT ONTO JACKLIN ROAD
TURN RIGHT ONTO ESCUELA PKWY
ARRIVE AT 1285 ESCUELA PKWY, MILPITAS

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. CALIFORNIA BUILDING CODE 2001
2. CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25) 2001
3. UNIFORM BUILDING CODE 2001
4. ANSI/EIA-222-F LIFE SAFETY CODE 101
5. NFPA-70,-1997
6. UNIFORM MECHICAL CODE 2001
7. UNIFORM PLUMBING CODE 2001
8. NATIONAL ELECTRIC CODE 1996
9. LOCAL BUILDING CODE(S)
10. CITY AND/OR COUNTY ORDINANCES

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	4
LS-1	SITE SURVEY	B
A-1	OVERALL SITE PLAN / ENLARGED SITE PLAN	4
A-2	EQUIPMENT AND ANTENNA LAYOUT	4
A-3	EXTERIOR ELEVATIONS	4

SHEET INDEX

ISSUED FOR: 100% ZONING
DATE: 06/01/04

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS IF NOT FULL SIZE TO 24"X36"

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

metroPCS

GTI
205 MAIN STREET, SUITE F
PLEASANTON, CA 94566
OFFICE: (925) 846-3212
FAX: (925) 846-3207

GTI JOB #04-191

SPACE RESERVED FOR PROFESSIONAL SEALS

RELEASE
DATE

REVISIONS

NO.	DATE	
6		
5		
4		
3	06/01/04	ISSUED PER JURISDICTION REQUEST
2	04/20/04	ISSUED PER JURISDICTION REQUEST
1	03/26/04	ISSUED FOR 100% ZONING
0	03/24/04	ISSUED FOR 90% ZONING

DRAWN BY PN
CHECKED BY LK

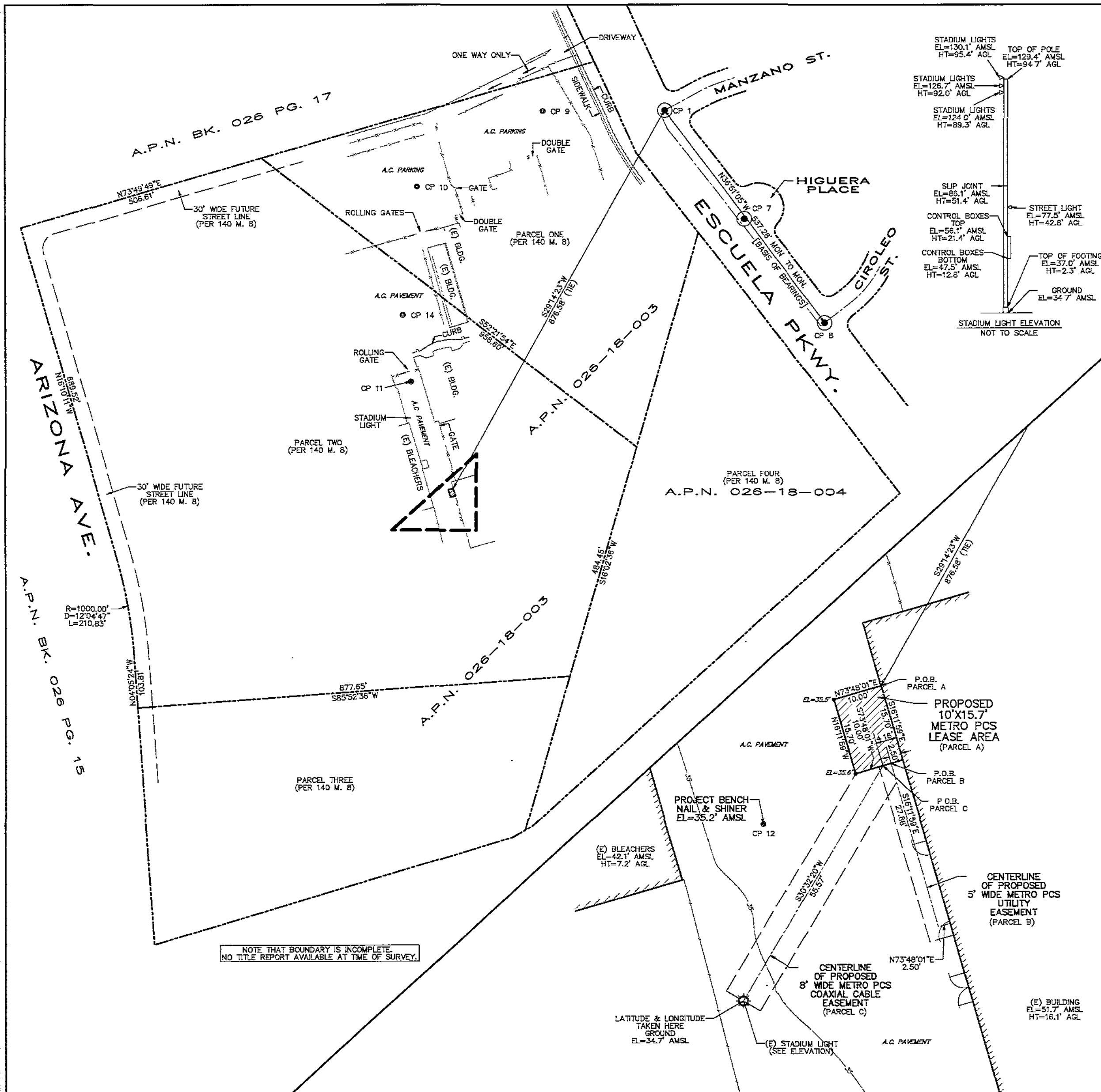
SITE NAME
MILPITAS HIGH SCHOOL

SITE #
SF06530A

SITE ADDRESS
1285 ESCUELA PARKWAY
MILPITAS, CA 95035

SHEET TITLE
TITLE SHEET

SHEET
T-1



OVERALL SITE MAP — SCALE: 1"=100' — 1

SITE MAP — SCALE: 1"=10' — 2

LEGEND

MANHOLE	FIRE HYDRANT
LIGHT POLE	MONUMENT
TREE	HANDICAPPED PARKING
JP JOINT POLE	TP TELEPHONE POLE
PP POWER POLE	+ EL=124.5' SPOT ELEVATION

EDGE OF PAVEMENT
—E— OVERHEAD ELECTRIC LINE
—X— FENCE LINE
PROPERTY LINE
AMSL.......ABOVE MEAN SEA LEVEL
AGL.........ABOVE GROUND LEVEL
CP #.... FIELD CONTROL POINT

DATE OF SURVEY. 03/13/04

SURVEYED BY/ OR UNDER THE DIRECTION OF: Oliver Philip Auer, LS 5075, Expires 06/30/07

NOTES:

THIS A SPECIALIZED TOPOGRAPHIC SURVEY MAP, NOT A RECORD OF SURVEY. BOUNDARY LINES AND EASEMENTS SHOWN HEREON ARE BASED UPON A TITLE REPORT PROVIDED BY THE CLIENT AND INFORMATION GATHERED FROM LOCAL AND STATE AGENCIES COMBINED WITH MONUMENTATION LOCATED DURING THE FIELD SURVEY. THE LOCATION OF EXISTING UTILITY FACILITIES HAS NOT BEEN RESEARCHED. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH ARE NOT SHOWN ON THIS PLAN.

UNDERLYING PROPERTY DESCRIPTION:

IN THE STATE OF CALIFORNIA, COUNTY OF SANTA CLARA, CITY OF MILPITAS, BEING PARCEL TWO, PER RECORD OF SURVEY, RECORDED NOVEMBER 7, 1961, IN BOOK 140 OF MAPS AT PAGE 8, SANTA CLARA COUNTY RECORDS.

LEASE AREA DESCRIPTION (PARCEL A):

COMMENCING AT A STANDARD CITY MONUMENT DENOTING THE INTERSECTION OF THE MONUMENT LINES OF ESCUELA PARKWAY AND MANZANO STREET, PER MAP OF TRACT NO. 5976, RECORDED APRIL 1, 197, IN BOOK 392 OF MAPS AT PAGES 5 AND 6, SANTA CLARA COUNTY RECORDS; THENCE SOUTH 29°14'23" WEST 876.58 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 16°11'59" EAST 15.70 FEET; THENCE SOUTH 73°48'01" WEST 10.00 FEET; THENCE NORTH 16°11'59" WEST 15.70 FEET; THENCE NORTH 73°48'01" EAST 10.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 157 SQUARE FEET MORE OR LESS.

TOGETHER WITH AN ACCESS ROUTE FROM THE LEASE AREA TO THE PUBLIC ROAD. *LOCATION TO BE DETERMINED AT A LATER DATE.*

TOGETHER WITH UTILITY AND POWER ROUTES NECESSARY TO SERVE THE LEASE AREA SHOWN HEREON AS PARCELS B AND C AND DESCRIBED IN THE ATTACHED EXHIBIT "A".

BASIS OF ELEVATIONS: NGVD 29 DATUM.

BASIS OF BEARINGS: 392 MAPS 5 & 6, SANTA CLARA COUNTY RECORDS.

PROJECT BENCH: AS INDICATED HEREON.

OWNER'S INFORMATION: MILPITAS UNIFIED SCHOOL DISTRICT
1331 E. CALAVERAS BLVD.
MILPITAS, CA 95035
A.P.N. 026-18-003

NET AREA OF:
UNDERLYING PARCEL(S). 21.395± AC. LEASE AREA: 157± AC.

FLOOD PLAIN ELEVATION OF LEASE AREA IN ZONE X 500, AS SHOWN ON FEMA FIRM MAP COMMUNITY-PANEL NUMBER 0603440001F, DATED MAY, 1996, PER FEMA CD-ROM.

FAA 1A CERTIFICATION:

LATITUDE AND LONGITUDE WAS OBTAINED FROM INFORMATION PROVIDED BY A GPS SURVEY. THE GEODETIC POSITION SHOWN WAS DETERMINED UTILIZING FAST-STATIC GPS OBSERVATIONS FROM USGS MONUMENTS USING TRIMBLE 4600LS RECEIVERS. THE DATA WAS DIFFERENTIALLY CORRECTED WITH TRIMBLE GPS SURVEY SOFTWARE.

LATITUDE AND LONGITUDE DENOTED ON THIS PLAN ARE ACCURATE TO WITHIN 15± FEET HORIZONTALLY AND THE ELEVATIONS SHOWN ON THIS PLAN ARE ACCURATE TO WITHIN 3± FEET VERTICALLY.

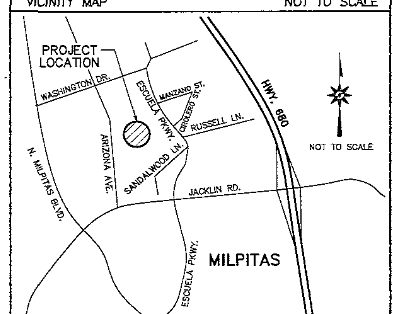
ELEVATION OF GROUND AT GPS POINT. 34.7' AMSL

STRUCTURE HEIGHT: STADIUM LIGHT/EL=130.1' AMSL/95.4' AGL

LATITUDE: 37°27'01.15" LATITUDE: 37°27'00.93"
LONGITUDE: 121°54'05.28" (NAD 27) LONGITUDE: 121°54'09.13" (NAD 83)

THE MAP WAS PREPARED FOR METRO PCS FOR THE PURPOSE OF FILING A PERMIT WITH THE CITY OF MILPITAS.

VICINITY MAP — NOT TO SCALE



MetroPCS

1080 MARINA VILLAGE PARKWAY
4TH FLOOR
ALAMEDA, CA 94501
(510) 523-2610

PROJECT INFORMATION:
MILPITAS HIGH SCHOOL
SFA-Z08-653A
1285 ESCUELA PARKWAY
MILPITAS, CA 95035
SANTA CLARA COUNTY

CURRENT ISSUE DATE: 03/16/04

ISSUED FOR: PERMIT

REV.	DATE	DESCRIPTION	BY
B	03/16/04	ISSUED FOR "CONTROL BOXES"	ESI
A	03/15/04	ISSUED FOR DRAFT #1	ESI

PLANS PREPARED BY:
Phil Auer Surveying
39382 Sutter Dr., Fremont, CA 94538
Phone (510) 796-2101
Fax: (510) 894-0794
E-mail: auercats@ix.netcom.com

CONSULTANT:

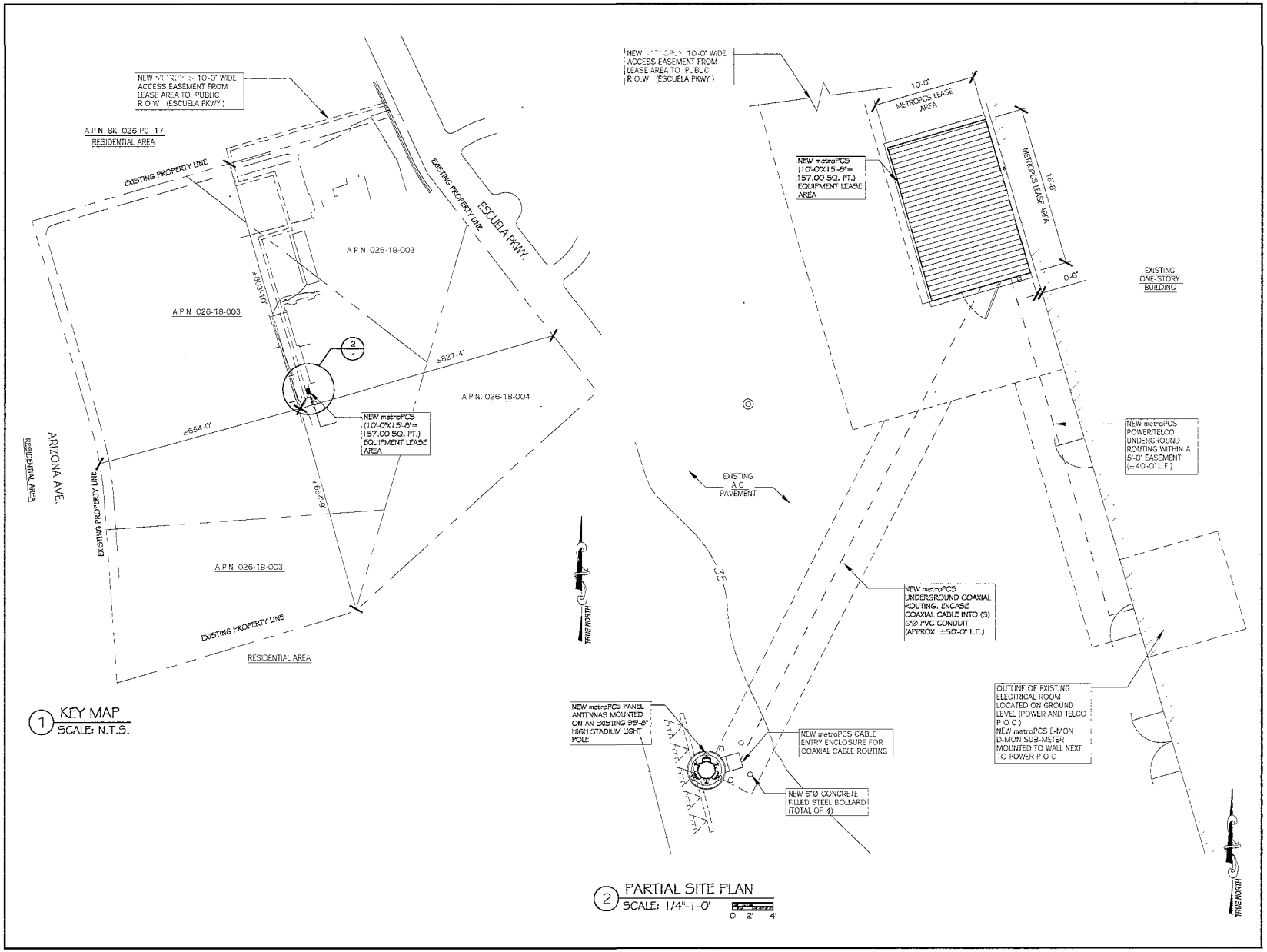
DRAWN BY:	CHK.:	APV.:
OPA	OPA	OPA

LICENSURE:
PREPARED BY OR UNDER THE DIRECTION OF:
Oliver Philip Auer (Expires 06/30/07) 5075

SHEET TITLE: SURVEY

SHEET NUMBER: LS1 REVISION: B

SFA-Z08-653A



metroPCS

GTI
205 MAIN STREET, SUITE F
PLEASANTON, CA 94566
OFFICE: (925) 846-3212
FAX: (925) 846-3207

GTI JOB #04-191

SPACE RESERVED FOR PROFESSIONAL SEAL

RELEASE	
DATE	

REVISIONS		
NO.	DATE	
6		
5		
4		
3		
2	05/01/04	ISSUED PER JURISDICTION REQUEST
1	04/20/04	ISSUED PER JURISDICTION REQUEST
0	03/25/04	ISSUED FOR 100% ZONING
0	03/24/04	ISSUED FOR 90% ZONING

DRAWN BY: PN
CHECKED BY: LK

SITE NAME

MILPITAS HIGH SCHOOL

SITE #

SF06530A

SITE ADDRESS

1285 ESCUELA PARKWAY
MILPITAS, CA 95035

SHEET TITLE

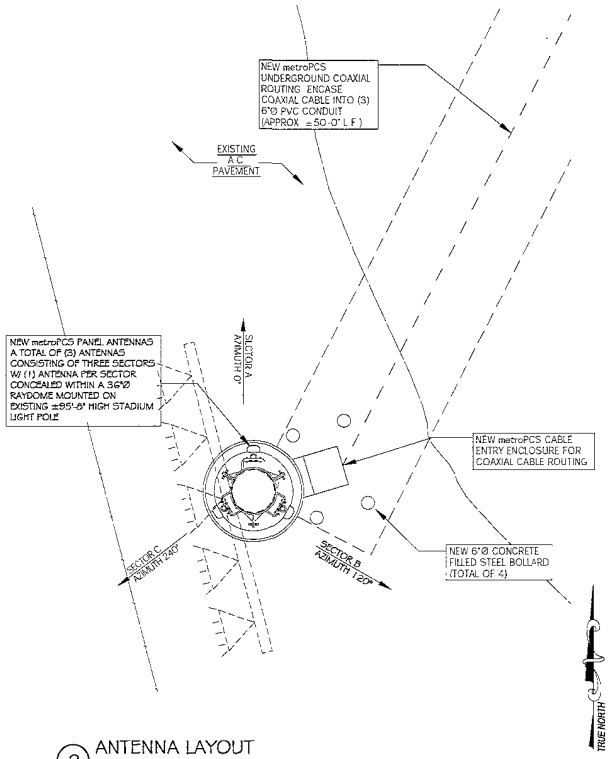
OVERALL SITE PLAN
PARTIAL SITE PLAN

SHEET

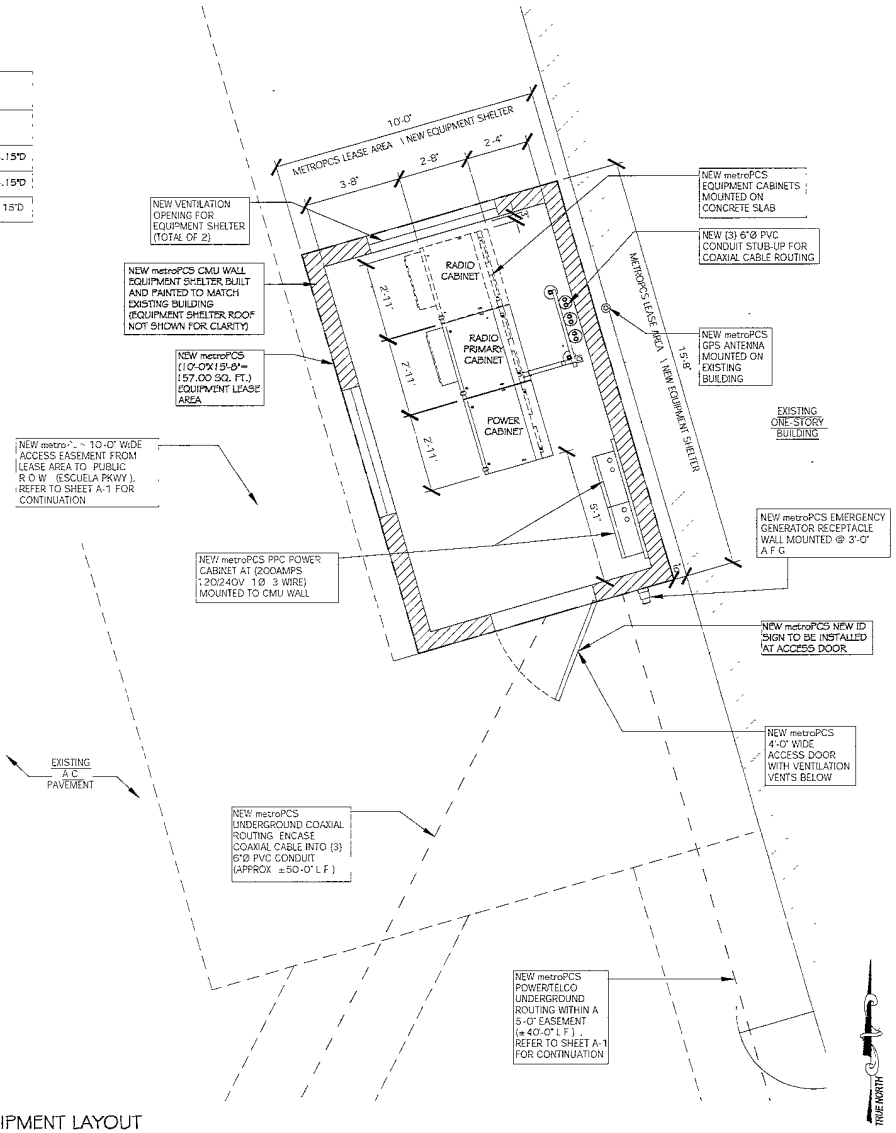
A-1

ANTENNA SCHEDULE

SECTOR	RAD CENTER	ANTENNA TYPE	NUMBER OF ANTENNA	CABLE SIZE	CABLE LENGTH	AZIMUTH	DOWN TILT	# CABLES PER ANTENNA	ANTENNA DIMENSIONS
A	83'-4"	ANTEL BXA-185060/8CF	1	7/8"	140'	0°	0°	2	50.32"L X 6.06"W X 3.15"D
B	83'-4"	ANTEL BXA-185060/8CF	1	7/8"	140'	120°	0°	2	50.32"L X 6.06"W X 3.15"D
C	83'-4"	ANTEL BXA-185060/8CF	1	7/8"	140'	240°	0°	2	50.32"L X 6.06"W X 3.15"D



2 ANTENNA LAYOUT
SCALE: 1/2"=1'-0" 0 1' 2'



1 EQUIPMENT LAYOUT
SCALE: 1/2"=1'-0" 0 1' 2'

metroPCS

GTI
205 MAIN STREET, SUITE F
PLEASANTON, CA 94566
OFFICE: (925) 846-3212
FAX: (925) 846-3207

GTI JOB #04-191

SPACE RESERVED FOR PROFESSIONAL SEALS

RELEASE
DATE

REVISIONS

NO	DATE	
5		
4		
3		
2		
1	08/01/04	ISSUED PER JURISDICTION REQUEST
3	04/20/04	ISSUED PER JURISDICTION REQUEST
2	03/28/04	ISSUED FOR 100% ZONING
1	03/24/04	ISSUED FOR 90% ZONING

DRAWN BY: PN
CHECKED BY: LK

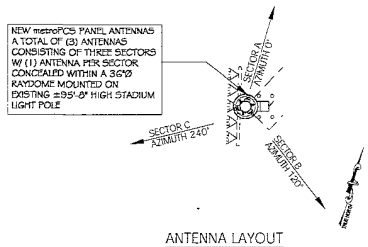
SITE NAME
MILPITAS HIGH SCHOOL

SITE #
SF06530A

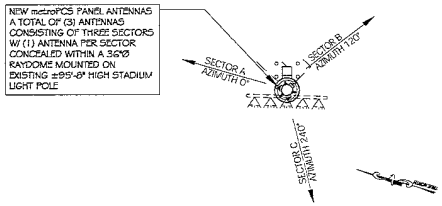
SITE ADDRESS
1285 ESCUELA PARKWAY
MILPITAS, CA 95035

SHEET TITLE
EQUIPMENT AND ANTENNA LAYOUT

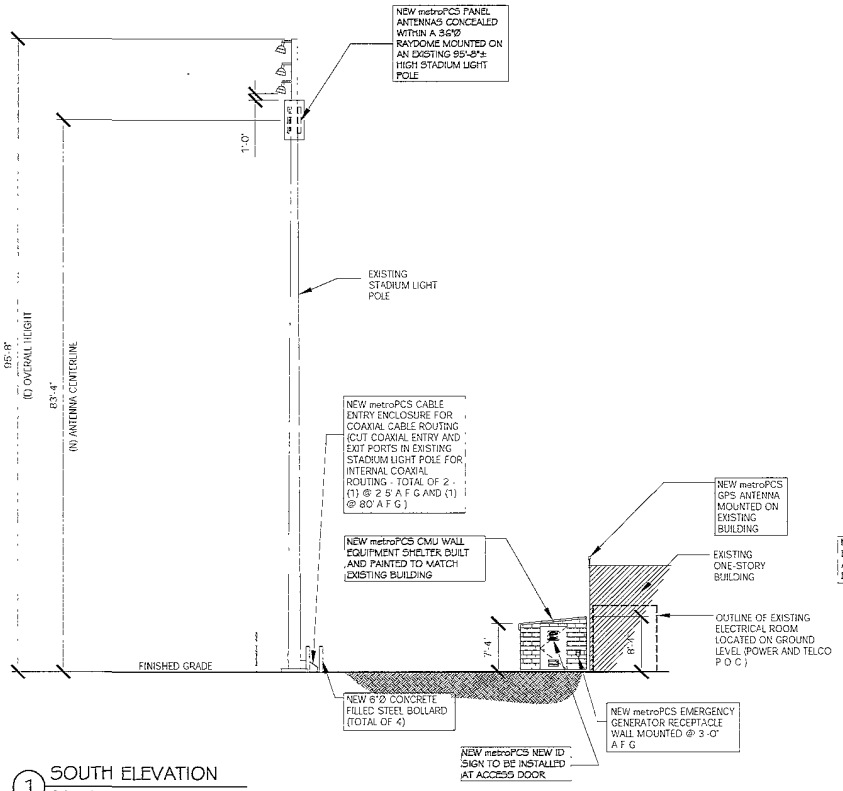
SHEET
A-2



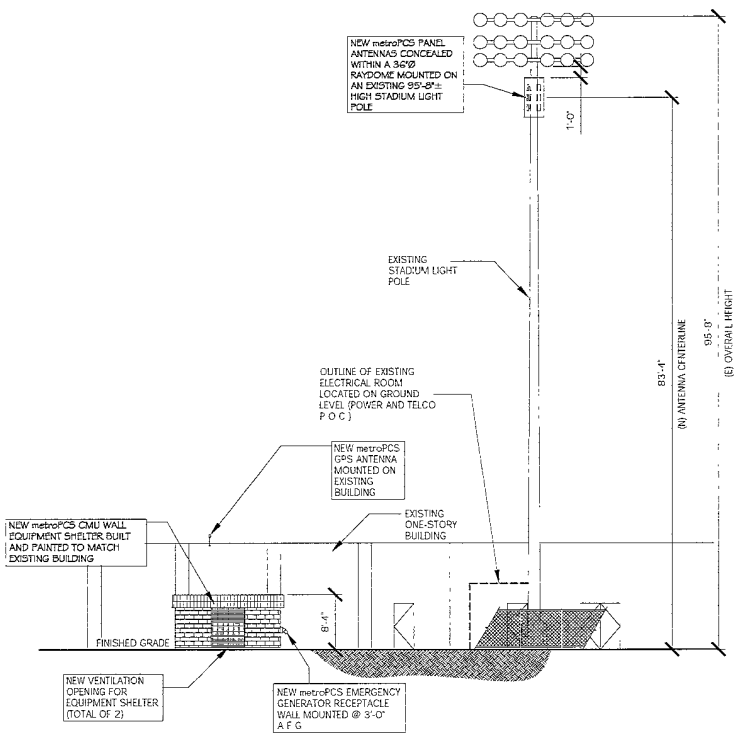
ANTENNA LAYOUT



ANTENNA LAYOUT



1 SOUTH ELEVATION
SCALE: 1/8"=1'-0"
0 4' 8'



2 WEST ELEVATION
SCALE: 1/8"=1'-0"
0 4' 8'

metroPCS

GTI
205 MAIN STREET, SUITE F
PLEASANTON, CA 94566
OFFICE: (925) 846-3212
FAX: (925) 846-3207

GTI JOB #04-191

IMAGE RESERVED FOR PROFESSIONAL SEAL

RELEASE	
DATE	

REVISIONS		
NO	DATE	
6		
5		
4		
3		
3	05/31/04	ISSUED PER JURISDICTION REQUEST
2	04/20/04	ISSUED PER JURISDICTION REQUEST
2	03/29/04	ISSUED FOR 100% ZONING
1	03/24/04	ISSUED FOR 60% ZONING

DRAWN BY PN
CHECKED BY LK

SITE NAME

MILPITAS HIGH SCHOOL

SITE #

SF06530A

SITE ADDRESS

1285 ESCUELA PARKWAY
MILPITAS, CA 95035

SHEET TITLE

EXTERIOR ELEVATION

SHEET

A-3